

Session 3 – Accuracy and Scheduling

Chairs: Evan Hoffman, John Degnan, Ludwig Grundwalt, Kalvis Salmins

6 presentations with submitted abstracts

6 posters

5 discussion point topics (good discussion!), some dropped due to time constraints

Station Performance survey:

- Equipment/Budget/Weather (the usual), Daylight tracking woes
- Prediction complaints – may in some cases be related to other factors (pointing errors)
- Response weighted heavily towards high performing stations

Tools for tracking performance, how do we communicate:

- Emails are easy to disregard, Monthly telecons of sub-networks may help, Language Barrier
- If stations don't respond to communication, are they non-participating? What does this mean?

TIU replacement by Event timers in NASA Systems (Varghese)

- Performance improvements of NASA systems and parallel TIU/ET data flow

Single vs Multiphoton ranging

- Multiphoton for quicker acquisition and centroiding to eliminate biases (Degnan)
- But evidence shows single photon stations are superior in bias stability and NP spread (Prochazka)

Simultaneous Tracking of cannon ball satellites:

- Long arcs have gotten very good, short arcs would only show system biases at the 1 cm level

Correlation of histograms for LAGEOS with actual returns (Arnold)

- Using a correlation function eliminated biases in LAGEOS distribution with truncated tail, need to try with simulated noise

Delay compensated Optical Time and Frequency Distribution for Space Geodesy (Schreiber)

- Active control of undocumented system delays in the optical regime by the virtue of closure measurement

Time bias analysis and prediction (Bauer)

- Prototype service to predict TB of predictions using the EDC database

Definition of the Normal Point

- May 2012 Herstmonceux Amendment contains FR requirement necessary for 1 mm, 1000 FR should be removed in favor of station specific requirement (1 mm or flicker floor)

Sky clarity comparisons between Riga and Metsahovi (Del Pino)

- Joint observation of clouds determines frequency of possible shared tracking campaigns